

# MISSION ENERGY, LLC

October 6, 1997

Bureau of Land Management  
Price River Resource Area  
125 South 600 West  
Price, UT 84501

Re: All Wells Permitted in  
Carbon County, Utah

Gentlemen:

This letter is to inform you that Permitco Inc. is authorized to act as Agent and to sign documents on behalf of Mission Energy L.L.C. when necessary for filing county, state and federal permits including Onshore Order No. 1, Right of Way applications, etc., for the above-mentioned well.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Mission Energy L.L.C. agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above-mentioned well.

Sincerely,



C.B. Willard  
Executive Vice President

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. <b>UTU-65486</b>
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME <b>N/A</b>
2. NAME OF OPERATOR <b>Mission Energy, L.L.C.</b>		7. UNIT AGREEMENT NAME <b>N/A</b>
3. ADDRESS AND TELEPHONE NO. <b>303/292-9775</b> <b>621 17th St., Suite 2450</b> <b>Denver, CO 80293</b>		8. FARM OR LEASE NAME, WELL NO. <b>Federal</b>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *) At Surface <b>1613' FNL and 2228' FWL</b> At proposed prod. zone <b>SE NW Section 19, T12S - R16E</b>		9. API WELL NO. <b>#1-19</b>
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* <b>Approximately 38.6 miles south of Myton, Utah</b>		10. FIELD AND POOL, OR WILDCAT <b>Wildcat</b>
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) <b>2228'</b>	16. NO. OF ACRES IN LEASE <b>1955.20 Acres</b>	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>Section 19, T12S - R16E</b>
18. DISTANCE FROM PROPOSED LOCATION * TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. <b>N/A</b>	19. PROPOSED DEPTH <b>5,700'</b>	12. COUNTY OR PARISH <b>Carbon</b>
21. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>5,614' ungraded</b>		13. STATE <b>Utah</b>
20. ROTARY OR CABLE TOOLS <b>Rotary</b>		
22. APPROX. DATE WORK WILL START* <b>October 1, 1998</b>		
23. PROPOSED CASING AND CEMENTING PROGRAM		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT
12-1/4"	8-5/8"	24#
7-7/8"	5-1/2"	15.5 & 17#
SETTING DEPTH		QUANTITY OF CEMENT
500'		385 sx-Class "G" - Circ. To Surface
5,700'		980 sx Poz & G. Top of cement @ 1600'

Mission Energy, L.L.C. proposes to drill a well to 5,700' to test the Wasatch and Mesa Verde Formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached. **CONFIDENTIAL - TIGHT HOLE**

Please be advised that Mission Energy, L.L.C. is considered to be the Operator of the above mentioned well. Mission Energy, L.L.C. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

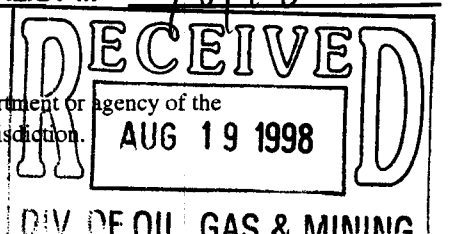
Bond coverage for this well is provided by Bond No. UT-1091. The principal is Mission Energy, L.L.C. via surety consent as provided for in 43 CFR 3104.2.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. <b>Lisa L. Smith</b> SIGNED <i>[Signature]</i> TITLE <b>Mission Energy, L.L.C.</b> DATE <b>8/17/98</b>	
(This space for Federal or State office use)	
PERMIT NO. <b>43-007-30471</b>	APPROVAL DATE <b>9/8/98</b>
Application approval does not warrant Federal Approval of title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	
CONDITIONS OF APPROVAL, IF ANY <b>Action is Necessary</b>	
APPROVED BY <i>[Signature]</i>	TITLE <b>BRADLEY G. HILL</b> <b>RECLAMATION SPECIALIST III</b>

\*See Instructions On Reverse Side

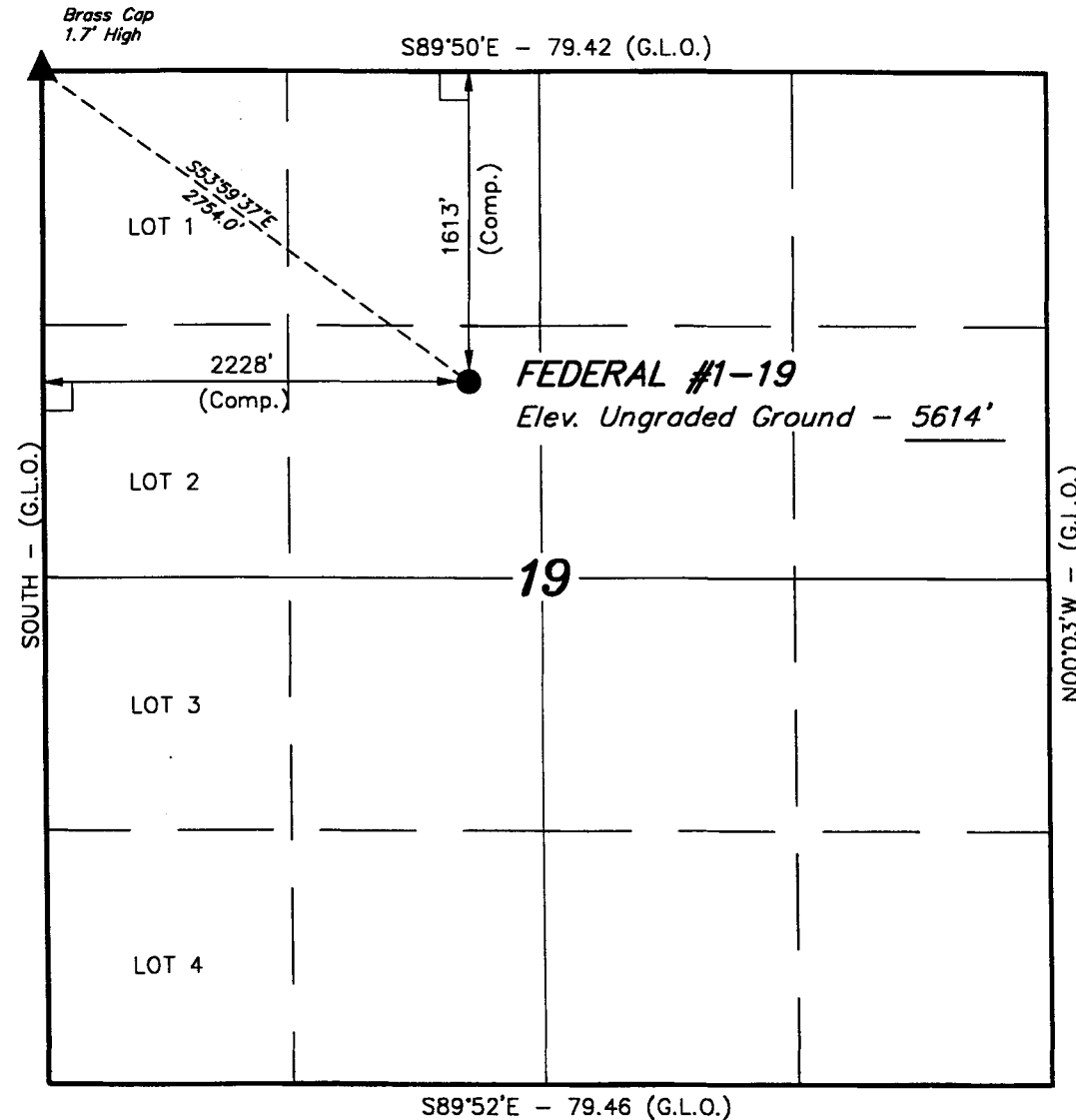
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



**T12S, R16E, S.L.B.&M.**

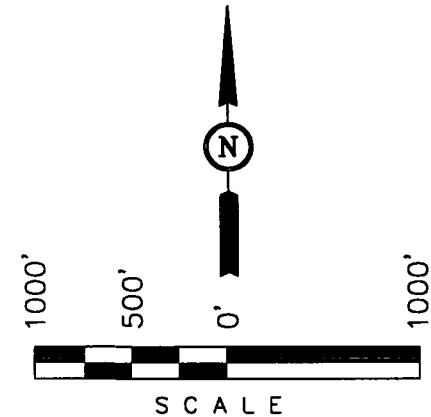
**MISSION ENERGY, L.L.C.**

Well Location, FEDERAL #1-19, located as shown in SE 1/4 NW 1/4 of Section 19, T12S, R16E, S.L.B.&M. Carbon County, Utah.



**BASIS OF ELEVATION**

SPOT ELEVATION NEAR A ROAD LOCATED IN THE NW 1/4 SE 1/4 OF SECTION 7, T12S, R16E, S.L.B.&M. TAKEN FROM THE COWBOY BENCH, QUADRANGLE, UTAH, CARBON COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5435 FEET.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF UTAH  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 16819  
 STATE UTAH  
 ROBERT L. KAY

**LEGEND:**

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

**NOTE:**

BASIS OF BEARINGS IS A LINE BETWEEN THE SOUTHWEST & NORTHEAST CORNER OF SECTION 18, T12S, R16E, S.L.B.&M. WHICH IS ASSUMED FROM G.L.O. INFORMATION TO BEAR S44°50'57\"W.

**UINTAH ENGINEERING & LAND SURVEYING**

**85 SOUTH 200 EAST - VERNAL, UTAH 84078**

**(435) 789-1017**

SCALE 1" = 1000'	DATE SURVEYED: 07-01-98	DATE DRAWN: 07-06-98
PARTY D.A. K.H. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE MISSION ENERGY, L.L.C.	

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ONSHORE ORDER NC  
Mission Energy, L.L.C.  
Federal #1-19  
1613' FNL and 2228' FWL  
SE NW Sec. 19, T12S - R16E  
Carbon County, Utah

CONFIDENTIAL - TIGHT HOLE

Lease No. UTU-65486

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**ONSHORE OIL & GAS ORDER NO. 1**  
**Approval of Operations on Onshore**  
**Federal and Indian Oil and Gas Leases**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Estimated Tops/ Geologic Markers

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Green River	Surface	+6128'
Uteland Butte	1780'	+3850'
Upper Wasatch	1830'	+3800'
Middle Wasatch	3230'	+2400'
Lower Wasatch	4730'	+900'
Mesa Verde/T.D.	5630'	+0'

2. Estimated Depth of Oil, Gas Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Water	Green River	200'-500'
Oil/Gas	Green River/Uteland Butte	1500'-1830'
Gas/Condensate	Wasatch	1830'-5630'
Gas/Condensate	Mesa Verde	5630'-T.D.

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.



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All water shows and water-bearing sands will be reported to the BLM in Moab, Utah. Copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

### 3. BOP Equipment

Mission Energy's minimum specifications for pressure control equipment are as follows:

**Ram Type: 10" Hydraulic double, 2000 psi w.p.**

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30-day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.



**When testing the kill line valve(s) the check valve shall be held open or the ball removed.**

**Annular preventers (if used) shall be functionally operated at least weekly.**

**Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.**

**A BOPE pit level drill shall be conducted weekly for each drilling crew.**

**The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.**

**Pressure tests shall apply to all related well control equipment.**

**All of the above described tests and/or drills shall be recorded in the drilling log. Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request. Pressure tests shall apply to all related well control equipment.**

**BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.**

**The Price River Resource Area Office shall be notified, at least 24 hours prior to initiating the pressure test, in order to have a BLM representative on location during pressure testing.**

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment**



for this depth of hole in the area use a 11", 3000 psi working pressure blowout preventor.

- b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

4. Casing and Cementing Program

- a. The Price River Resource Area Office shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.
- b. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including; presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.
- c. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).





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- d. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- e. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- f. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- g. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- h. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- i. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- j. Three centralizers will be run on the bottom three joints of surface casing with a minimum of one centralizer per joint starting with the shoe joint.
- k. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.
- l. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- m. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be



performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

- n. The proposed casing program will be as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Surface	0-500'	12-1/4"	8-5/8"	24.0#	J-55	ST&C	New
Produc.	0-500'	7-7/8"	5-1/2"	17.0#	N-80	LT&C	New
Produc.	500-3600'	7-7/8"	5-1/2"	15.5#	J-55	LT&C	New
Produc.	3600-T.D.	7-7/8"	5-1/2"	17.0#	N-80	LT&C	New

Used casing will be yellow band and will be tested to API standards for new casing.

- o. Casing design subject to revision based on geologic conditions encountered.

- p. The cement program will be as follows:

<u>Surface</u>	<u>Type and Amount</u>
0-500'	385 sx Class "G" with 2% CaCl <sub>2</sub> with 46% water and 1/4#/sk celloflake, or sufficient volume to circulate to surface.

<u>Production</u>	<u>Type and Amount</u>
1600-5700'	530 sx 28:72 Poz followed by 450 sx 14.3# "G" with 10% gyp. Estimated top of cement at 1600'.

- q. The Price River Resource Area Office should be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.
- r. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.



- s. The following reports shall be filed with the District Manager within 30 days after the work is completed.
1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
- a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.
- b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.
- t. Auxiliary equipment to be used is as follows:
1. Kelly cock
2. No bit float is deemed necessary.
3. A sub with a full opening valve.

5. Mud Program

- a. The proposed circulating mediums to be employed in drilling are as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>	<u>PH</u>
0-T.D.	Produced Water and KCL with Air	9.0	34	12	8.0

There will be sufficient mud on location to control a blowout should one occur.



A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, static filtration loss, and Ph.

- b. Mud monitoring equipment to be used is as follows:
  - 1. Periodic checks will be made each tour of the mud system. The mud level will be checked visually.
- c. Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing or completion operations.

6. Evaluation Program

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are anticipated, however, if DST's are run, the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided some means for reverse circulation.



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Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of an Array Induction/ Gamma Ray from Surface to T.D.
- c. No cores are anticipated.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the authorized officer (AO).
- e. The anticipated completion program is as follows:

Perforate Wasatch zone and frac w/5,000# sand per net pay of sand.

7. Anticipated Pressures and H<sub>2</sub>S

- a. The expected maximum bottom hole pressure is 2200 psi. No abnormal pressures are anticipated.
- b. No hydrogen sulfide gas is anticipated.



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**8. Other Information and Notification Requirements**

- a. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- b. Production data shall be reported to the MMS pursuant to 30 CFR 216.5 using form MMS/3160.
- c. The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or the date on which gas is first measured through permanent metering facilities, whichever first occurs.
- d. Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.
- e. Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.



- f. A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3 and 3162.7-4 shall be submitted to the appropriate District Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in 43 CFR 3162.7 and Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.
- g. Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

- h. Drilling operations are planned to commence on immediately upon approval of this application due to High County Winter stipulations and a December 31, 2000 lease expiration.
- i. It is anticipated that the drilling of this well will take approximately 14 days.
- j. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.



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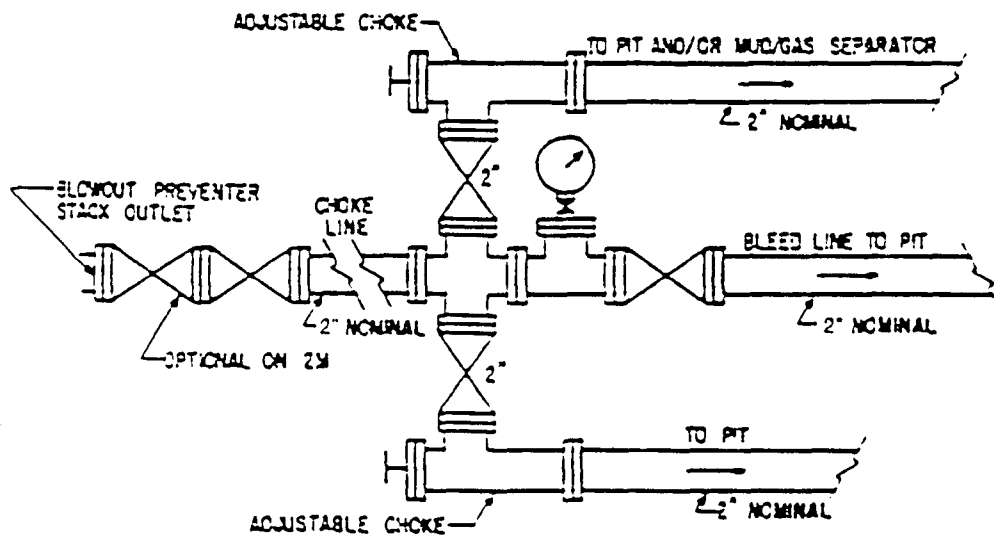
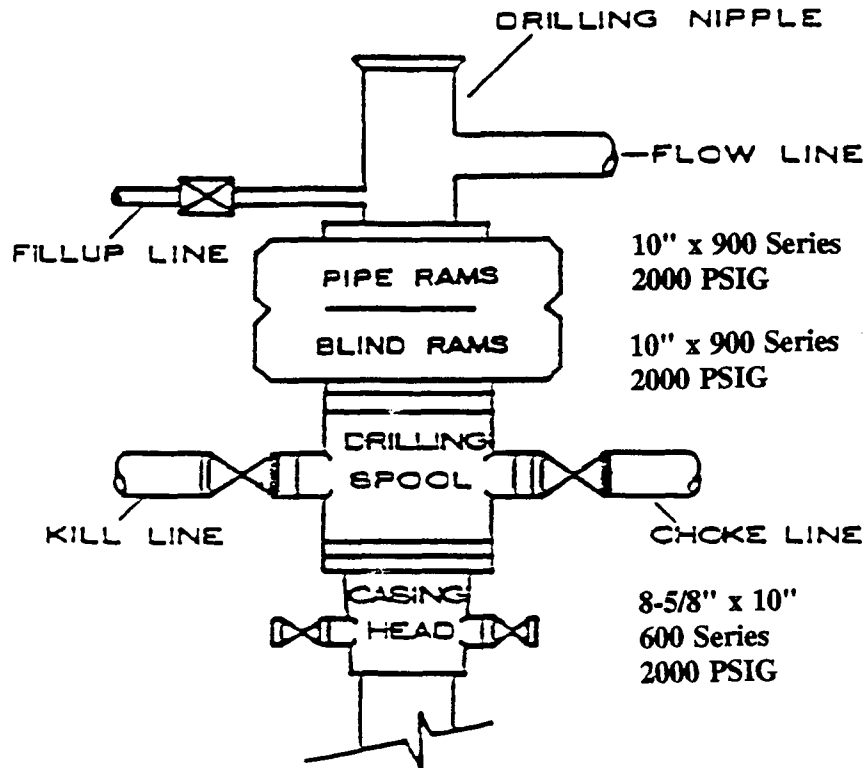
- k. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
- l. If a replacement rig is contemplated for completion operations, a "Sundry Notice" Form 3160-5 to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- m. Pursuant to Onshore Order No. 7, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- n. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.





# BOP STACK

2,000 PSI



2,000 PSI CHOKER MANIFOLD

ONSHORE ORDER NO. 1  
Mission Energy, L.L.C.  
Federal #1-19  
1613' FNL and 2228' FWL  
SE NW Sec. 19, T12S - R16E  
Carbon County, Utah

CONFIDENTIAL - TIGHT HOLE

Lease No. UTU-65486

Surface Use Plan  
Page 1

ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan

An onsite inspection of the subject well was conducted on Thursday, July 30, 1998 at approximately 10:45 a.m. Weather conditions were cool and cloudy. In attendance at the onsite inspection were the following individuals:

David Mills	Wildlife Biologist	BLM
Dean Nyffeler	Geologist	BLM
Blain Miller	Archeologist	BLM
Chad Hunter	Wild Horse Specialist	BLM
Mike Kaminski	Soil/Reveg. Spec.	BLM
Dennis Willis	Recreation/Visuals	BLM
Lisa Smith	Permitting Agent	Permitco Inc.
Robert Kay	Land Surveyor	UELS
Jerry Bergeson	Engineering Consultant	Mission Energy
Wayne Fisher	Field Consultant	Mission Energy

1. Existing Roads

- a. The proposed well site is located approximately 57 miles south of Myton, Utah.
- b. Directions to the location from Myton, Utah are as follows:

From Myton proceed in a southwesterly direction along U.S. Highway 40 approximately 1.5 miles to the junction of this road and an existing road to the south. Turn left and proceed in a southerly direction for 30.3 miles through Gate Canyon. At the intersection of Nine Mile Canyon, turn left and proceed southeasterly for 5 miles. Turn right and proceed southerly in Dry Canyon for 1.8 miles. Turn left onto the new access route (flagged) and proceed northeasterly approximately 250 feet to the location.

- c. For location of access roads within a 2-Mile radius, see Maps A & B.



**ONSHORE ORDER NO. 1**  
**Mission Energy, L.L.C.**  
**Federal #1-19**  
**1613' FNL and 2228' FWL**  
**SE NW Sec. 19, T12S - R16E**  
**Carbon County, Utah**

**CONFIDENTIAL - TIGHT HOLE**

**Lease No. UTU-65486**

**Surface Use Plan**  
**Page 2**

- d. Improvement to the existing access will be kept to a minimum. All blading will occur within the existing disturbed area.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

**2. Planned Access Roads**

- a. There will be approximately 250 feet of new access road to be constructed. The access will be flatbladed with a running surface of approximately 14 feet.
- b. The maximum grade will be 7%.
- c. No turnouts are planned.
- d. A low water crossing will be constructed across Dry Creek. All necessary permits will be filed with the Corp. of Engineers for this crossing by Uintah Engineering and Land Surveying. In the event that the well is productive and the culvert washes out at some point in time, the culvert will be replaced with a low water crossing.
- e. The new access road was centerline flagged at the time of staking.
- f. The need for surfacing material is not anticipated, however, should it become necessary, it will be installed at the discretion of the operator.
- g. No cattleguards will be necessary.



- h. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
  - i. No road right of way will be required as all access, off lease, is maintained by the County Road Department.
- 3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location.
  - a. Water wells -none
  - b. Injection wells -none
  - c. Producing wells - none
  - d. Drilling wells - none
- 4. Location of Tank Batteries and Production Facilities.
  - a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted a neutral color to blend with the surrounding environment. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.
  - b. If storage facilities/tank batteries are constructed on this lease, the facility/battery or the wellpad shall be surrounded by a containment dike of sufficient capacity to contain at a minimum, the entire content of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.
  - c. All loading lines will be placed inside the berm surrounding the tank battery.
  - d. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.



- e. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil and Gas Order No. 4 for liquid hydrocarbons and Onshore Oil and Gas Order No. 5 for natural gas measurement.
- f. A Sundry Notice will be submitted showing placement of all production facilities prior to construction.
- g. Any necessary pits will be properly fenced to prevent any wildlife entry.
- i. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- j. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the Authorized Officer.
- k. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.
- l. The road will be maintained in a safe useable condition.

**5. Location and Type of Water Supply**

- a. All water needed for drilling purposes will be obtained from the towns of Price or Wellington. Water will be purchased from the Price River Water District. No permit number is required by the Division of Water Resources.
- b. Water will be hauled to location over the roads marked on Maps A and B.
- c. No water well is to be drilled on this lease.



6. Source of Construction Material

- a. Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a private or commercial source.
- c. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.
- d. No construction materials will be removed from Federal land.

7. Methods of Handling Waste Disposal

- a. The reserve pit will be constructed so as not to leak, break, or allow discharge. The reserve pit will be lined to prevent water seepage. The wellpad will be sloped toward the pit. Runoff will be controlled.
- b. A plastic nylon reinforced liner will be used. It will be a minimum of 12 mil thickness with sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit.
- c. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal site.
- d. After first production, produced waste water will be confined to a storage tank for a period not to exceed ninety (90) days. During the 90-day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.
- e. Drill cuttings are to be contained and buried in the reserve pit.



- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- g. Sewage will be placed in a portable chemical toilet or holding tank and disposed of in accordance with state and county regulations.
- h. The produced fluids (other than water) will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas salt water or other produced fluids will be cleaned up and removed.

**8. Ancillary Facilities**

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

**9. Well Site Layout**

- a. The reserve pit will be located on the northeast side of the location.
- b. The stockpiled topsoil (first six inches) will be stored along the perimeter of the location as shown on the location layout.
- c. See Location Layout for orientation of rig, cross section of drill pad and cuts and fills.
- d. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- e. During construction, any large brush will be removed from the wellpad and access road and stockpiled separately from the topsoil.
- f. All pits will be fenced to prevent wildlife entry.
- g. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.



10. Plans for Restoration of Surface

Producing Location

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. The plastic nylon reinforced liner shall be torn and perforated before backfilling of the reserve pit.
- d. Once the reserve pit is dry, the reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours.
- e. The location will be reclaimed and reseeded as per a seed mixture to be specified by the BLM in Price, Utah.

Dry Hole

- f. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment.

11. Surface Ownership

Access Roads - All roads are County maintained or are located on lands managed by the BLM.

Wellpad - The well pad is located on lands managed by the BLM.





12. Other Information

- a. A Class III archeological survey was conducted by Metcalf Archeological Consultants. A copy of this report is attached.
- b. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
  - whether the materials appear eligible for the National Register of Historic Places;
  - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
  - a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.
- c. All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.



ONSHORE ORDER NO. 1  
Mission Energy, L.L.C.  
Federal #1-19  
1613' FNL and 2228' FWL  
SE NW Sec. 19, T12S - R16E  
Carbon County, Utah

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- d. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.
- e. There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.h.
- f. "Sundry Notice and Report on Wells" (From 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- g. This permit will be valid for a period of one year from the date of approval. An extension period may be granted, if requested, prior to the expiration of the original approval period.
- h. The operator or his contractor shall contact the BLM Offices at 801/977-4300 48 hours prior to construction activities.

13. Lessee's or Operator's Representative and Certification

Permit Matters  
PERMITCO INC.  
Lisa L. Smith  
14421 Weld County Road 10  
Ft. Lupton, CO 80621  
303/857-9999

Drilling & Completion Matters  
MISSION ENERGY, L.L.C.  
621-17th Street, Suite 2450  
Denver, CO 80293  
303/292-9775 (Office)  
303/292-9280 (Fax)  
970/669-8217 (Home) - Wayne Fisher



ONSHORE ORDER NO  
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Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Mission Energy, L.L.C. and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

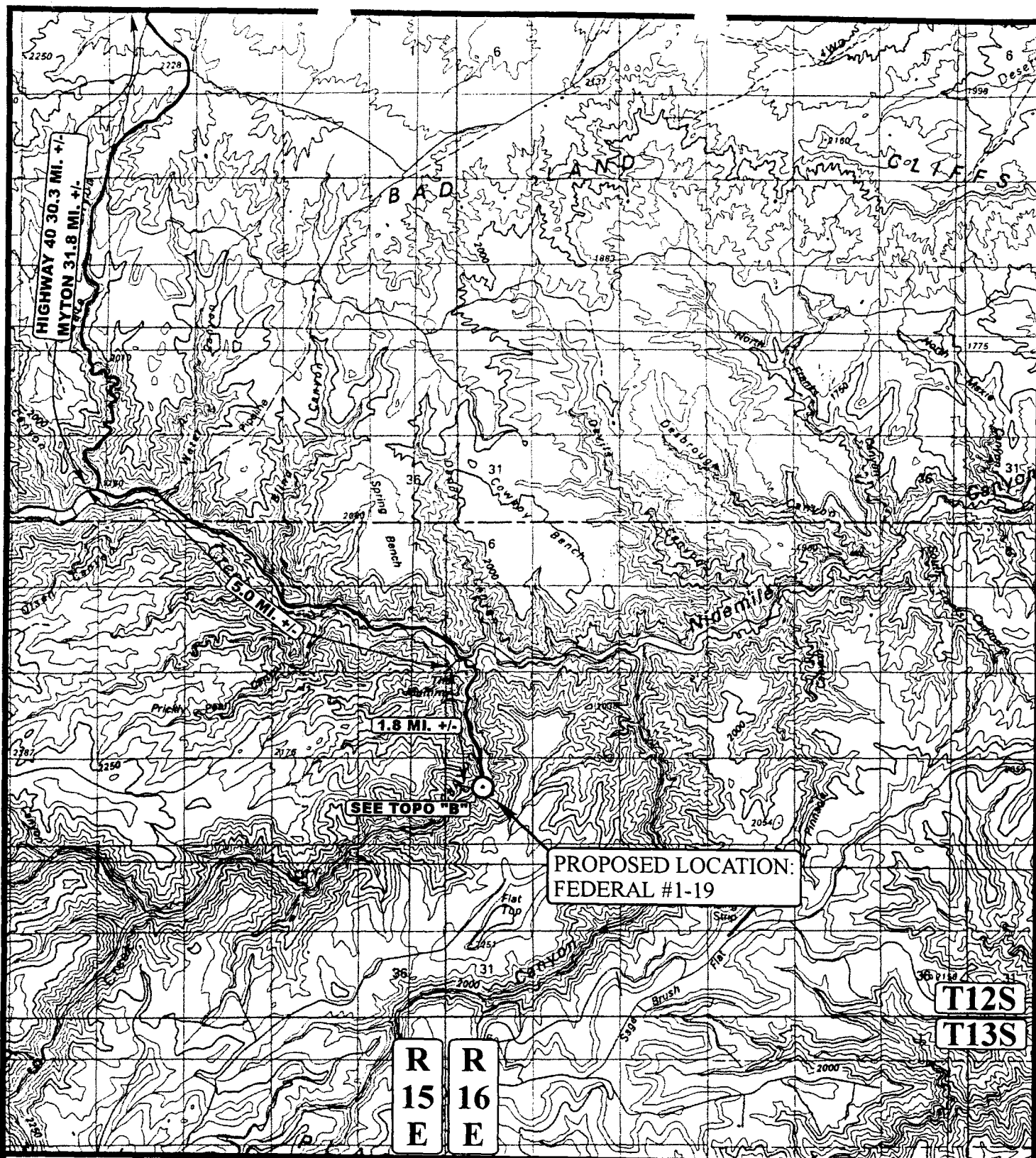
This statement is subject to the provisions of 18.U.S.C. 1001 for the filing of a false statement.

August 17, 1998

Date:

  
\_\_\_\_\_  
Lisa L. Smith - PERMITCO INC.  
Authorized Agent for:  
Mission Energy, L.L.C.





# **LEGEND:**

⊙ PROPOSED LOCATION

N

**MISSION ENERGY, L.L.C.**

**FEDERAL #1-19**

**SECTION 19, T12S, R16E, S.L.B.&M.**

**1613' FNL 2228' FWL**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

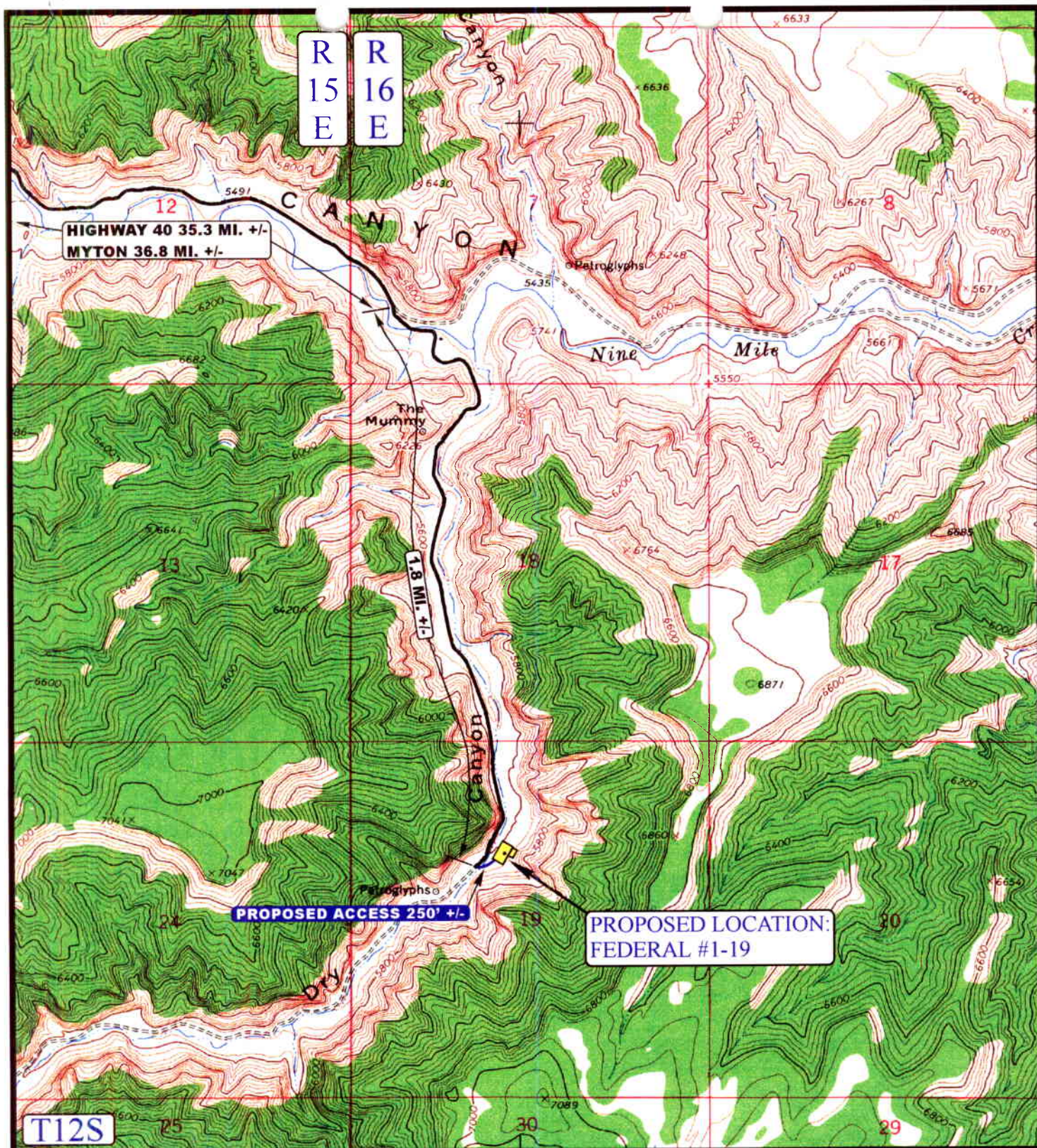
**TOPOGRAPHIC  
MAP**

**7 6 98**  
MONTH DAY YEAR

SCALE: 1 : 100,000 | DRAWN BY: J.L.G. | REVISED: 00-00-00

**A  
TOPO**





T12S

LEGEND:

--- PROPOSED ACCESS ROAD  
 --- EXISTING ROAD

MISSION ENERGY, L.L.C.

FEDERAL #1-19  
 SECTION 19, T12S, R16E, S.L.B.&M.  
 1613' FNL 2228' FWL

UELS

Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
 MAP

7 6 98  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00

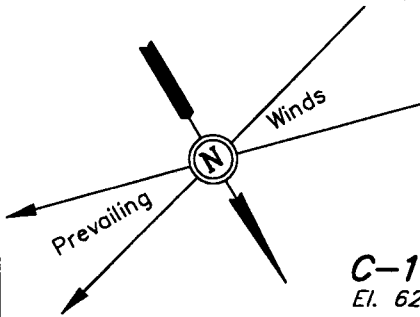
B  
 TOPO



# MISSION ENERGY, L.L.C.

## LOCATION LAYOUT FOR

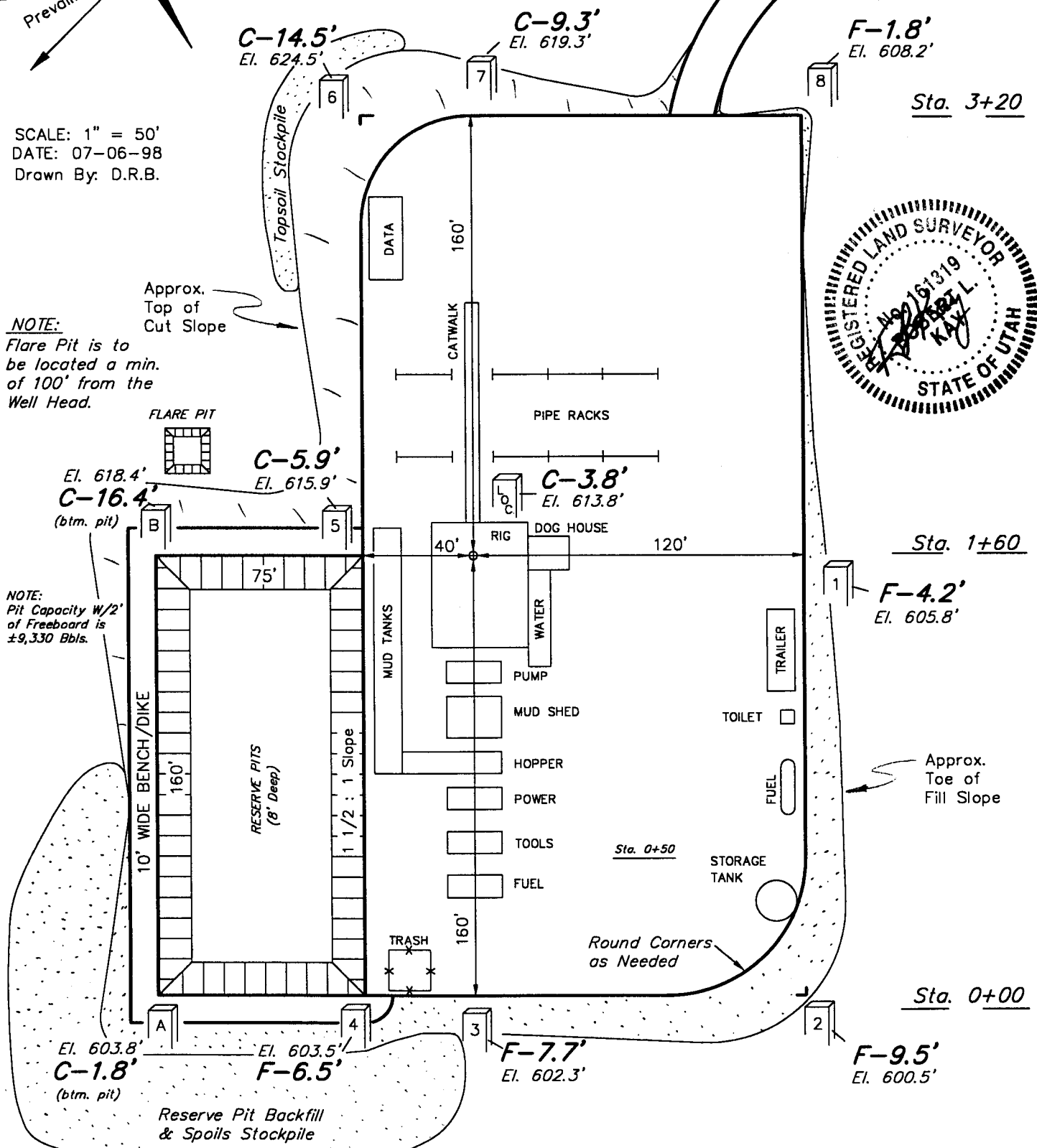
FEDERAL #1-19  
SECTION 19, T12S, R16E, S.L.B.&M.  
1613' FNL 2228' FWL



SCALE: 1" = 50'  
DATE: 07-06-98  
Drawn By: D.R.B.

**NOTE:**  
Flare Pit is to be located a min. of 100' from the Well Head.

**NOTE:**  
Pit Capacity W/2' of Freeboard is ±9,330 Bbls.



Elev. Ungraded Ground at Location Stake = 5613.8'  
Elev. Graded Ground at Location Stake = 5610.0'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

# MISSION ENERGY, L.L.C.

## TYPICAL CROSS SECTIONS FOR

FEDERAL #1-19

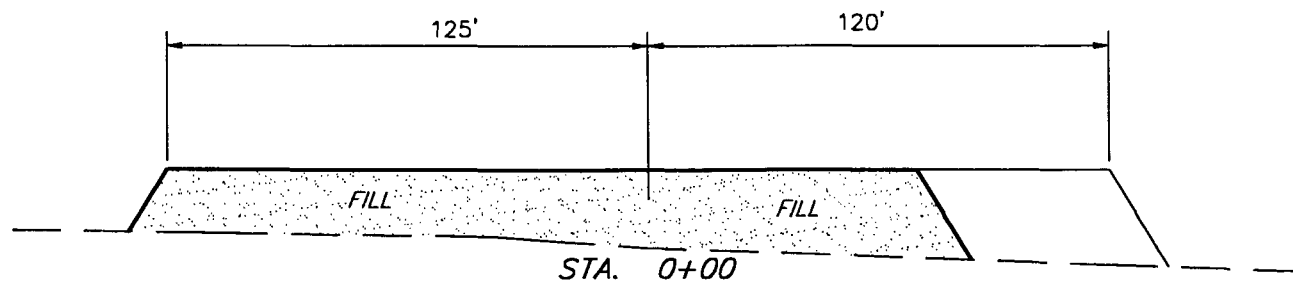
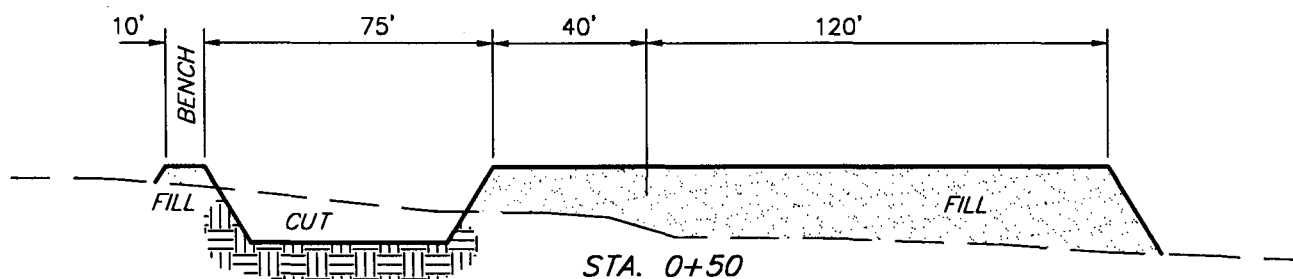
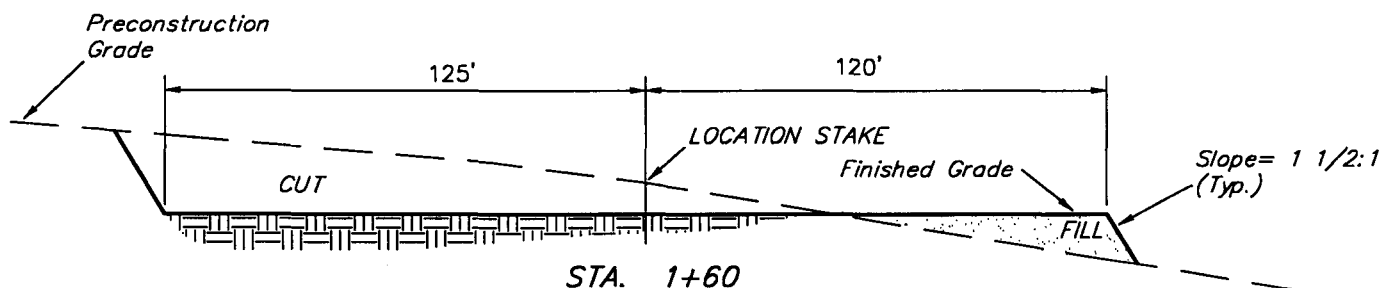
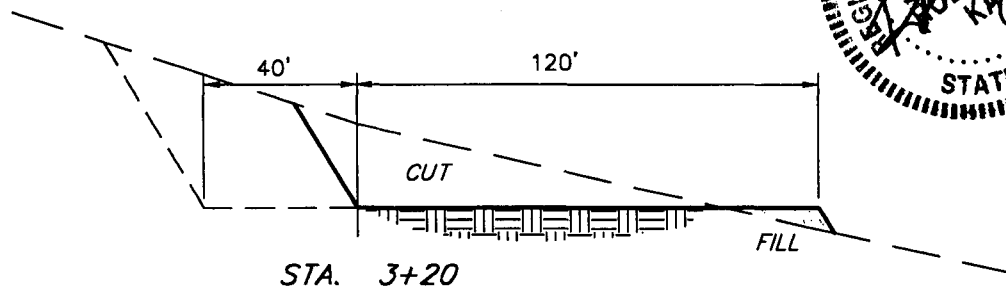
SECTION 19, T12S, R16E, S.L.B.&M.

1613' FNL 2228' FWL

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 07-06-98

Drawn By: D.R.B.



### APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,170 Cu. Yds.

Remaining Location = 8,550 Cu. Yds.

TOTAL CUT = 9,720 CU.YDS.

FILL = 6,800 CU.YDS.

EXCESS MATERIAL AFTER

5% COMPACTION

= 2,560 Cu. Yds.

Topsoil & Pit Backfill

= 2,560 Cu. Yds.

(1/2 Pit Vol.)

EXCESS UNBALANCE

= 0 Cu. Yds.

(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East \* Vernal, Utah 84078 \* (801) 789-1017

**No drilling activity will occur between November 1 and May 15 due to Big Game Winter Range, unless a waiver is granted by the authorized officer.**

**In addition, activity may also be suspended from February 1 through July 15, 1998 based on raptor survey results.**







**M A C**

**Metcalf Archaeological Consultants, Inc.**

---

August 11, 1998

Jerry Bergeson  
Mission Energy, LLC  
621 17<sup>th</sup> Street, Suite 2450  
Denver, CO 80293

re: Mission Energy Federal 1-19 well location and access

Dear Jerry,

Enclosed please find a copy of our report on the archaeological inventory for the proposed Mission Energy Federal 1-19 well and access. Two sites were found in this project area, and a third previously recorded site is reported to be within the project area but could not be found. This project area is entirely within the Nine Mile Canyon Archaeological District.

While we feel that these sites, when considered individually and outside the framework of the district, would be not eligible for the National Register, their inclusion in a National Register District brings a more specific context to bear on their evaluation. The District has not yet been enrolled on the National Register, and is not currently well defined. Its significance, especially as a rural historic landscape, has not been adequately described, and thus evaluation of cultural resources and impacts to the landscape within the district is problematic. As we have discussed by phone, we have little doubt that this area, including Dry Canyon, certainly qualifies to be a district, but lacking this critical definition and description, we do not feel we can make justifiable recommendations concerning these sites, nor do we feel that we can justify a recommendation for, or against, cultural resource clearance for this project.

In consultation with the BLM, we have agreed to make no recommendations, but have discussed what we feel to be potential impacts to these sites and to the district, and have indicated some mechanisms to minimize or eliminate some of these impacts based on experience and suggestions provided by the BLM Price River Resource Area archaeologist.

Two copies of this report, and site forms, have been sent to Blaine Miller, BLM Price River Resource Area archaeologist. He will forward one copy to the Utah State Historic Preservation Office.

If you have any questions, or need additional information, please do not hesitate to call.

Sincerely,

Anne McKibbin  
Senior Staff Archaeologist

enclosure

cc: Blaine Miller, BLM Price Field Office  
Lisa Smith, Permitco

MISSION ENERGY FEDERAL #1-19 WELL LOCATION AND ACCESS:  
CLASS III CULTURAL RESOURCE INVENTORY,  
CARBON COUNTY, UTAH

by  
Dulaney Barclay and Anne McKibbin  
Metcalf Archaeological Consultants, Inc.  
Eagle, Colorado

Prepared for,  
Mission Energy, L.L.C.  
Denver, Colorado

Project #U-98-MM-0302B  
BLM Permit #98-UT-54945  
(Expires 5/1/99)

August 1998

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## **Introduction**

Metcalf Archaeological Consultants, Inc. (MAC) of Eagle, Colorado conducted a Class III cultural resource inventory of the proposed Mission Energy Federal #1-19 well location and access in Carbon County, Utah. The well pad and access road are located in the SE/NW of section 19, T.12S, R.16E, in Dry Canyon, a tributary of Nine Mile Canyon (Figure 1). A ten acre block was inventoried around the proposed well pad center stake location (1613' FNL 2228' FWL). The proposed access road to the location exits the southwest corner of the proposed well pad and continues southwesterly across Dry Creek to an improved road running along the floor of Dry Canyon. The access road is approximately 250 feet in length and is completely contained within the inventory block. No additional inventory was necessary. Thus, a total of ten acres was inventoried during this investigation.

The project area is located on public lands administered by the Bureau of Land Management (BLM), Price River Resource Area. The inventory was mandated by the National Historic Preservation Act as amended because the proposed development is to occur on public lands. The project was carried out by MAC archaeologist Dulaney Barclay on July 22, 1998 under BLM Permit #98-UT-54945. All field notes, photographic negatives, and maps are on file at the MAC offices in Eagle, Colorado.

## **Statement of Objectives**

Following the mandated policies implementing the National Historic Preservation Act (NHPA [Public Law 89-665]), as amended, this project was inventoried to locate any cultural resources within the potential area of effect. Any discovered cultural resources were to be evaluated for eligibility to the National Register of Historic Places. To be eligible for the Register, the resources must retain essential aspects of integrity and meet one or more of the Criteria for Eligibility (36CFR§60.4). For archaeological resources, eligibility is typically recommended under Criterion d, on the basis of the information potential of surface artifacts and features, and intact subsurface cultural deposits. Historical resources may be evaluated under any of the four Criteria on the basis of information potential or significant historic associations. Additionally, this project area is within the Nine Mile Canyon Archaeological District, a rural historic landscape. Though not currently enrolled on the National Register, this district is being managed as such for the purposes of evaluating and managing cultural resources within it.

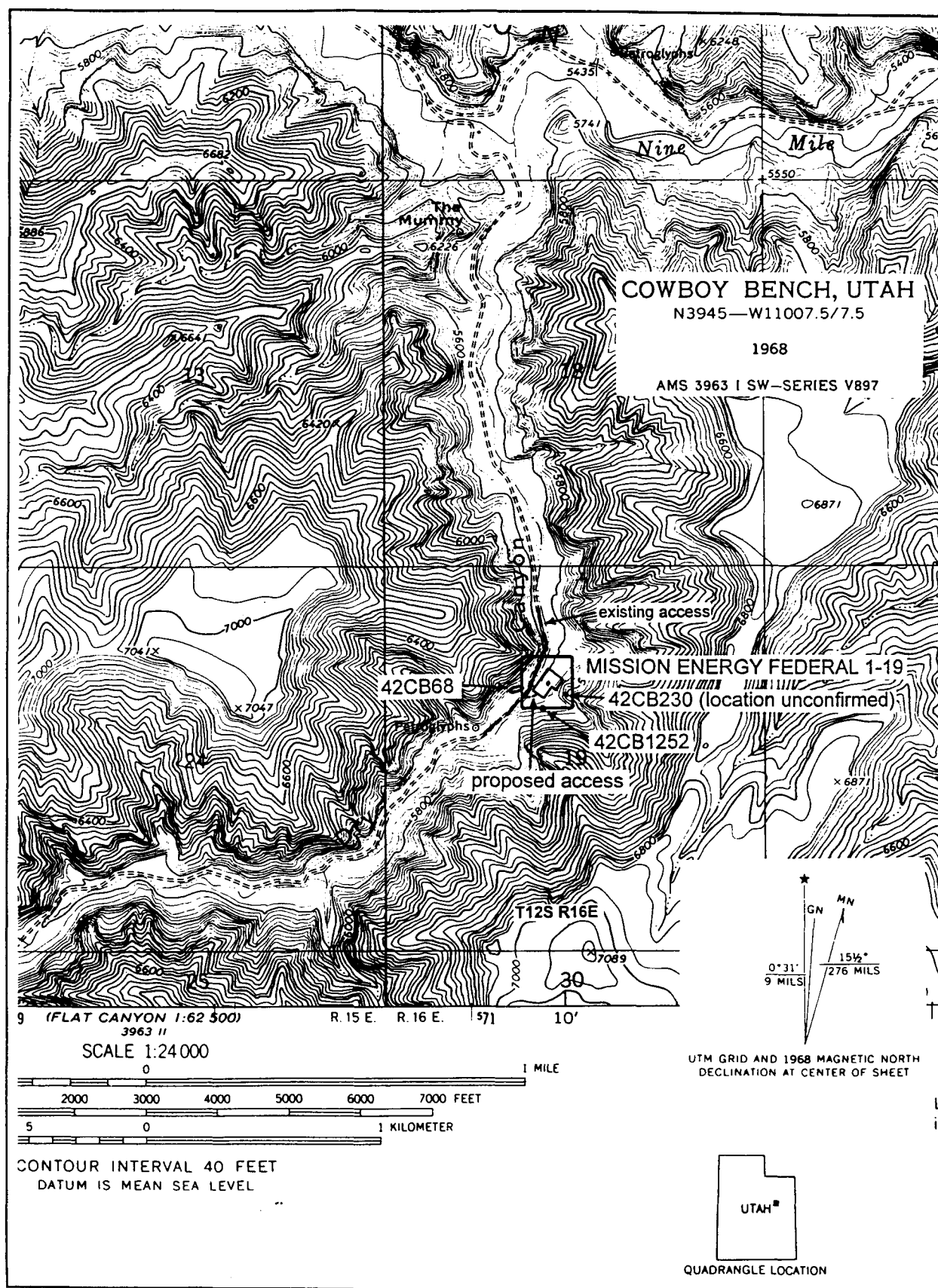


Figure 1 Project area

## Effective Environment

The project area is situated within a deeply incised canyon on the dissected West Tavaputs Plateau in East Central Utah. The West Tavaputs Plateau forms the southwestern boundary of the Uintah Basin and borders the Price River valley, a tributary of the Green River, on the northeast. The local bedrock in the area consists of various members of the Eocene Uinta Formation (Hintze 1980). The bedrock of the uplifted plateau has been deeply incised forming very steep walled canyon with an abundance of cliff faces. Topography within the canyons is controlled by the nearly horizontal beds of sandstone, shale, and clay. The sandstone beds form narrow ledges while the softer more erodible shales and clays form alcoves underneath the sandstone ledges. Drainage in the area is via a dendritic system of ephemeral and intermittent drainages which flow north into Nine Mile Creek that in turn flows easterly to join the Green River at the head of Desolation Canyon several miles away. The present channel of Dry Creek appears to have been diverted somewhat easterly in the southwest corner of the inventory block from the course depicted on the 1968 topographic map.

The proposed well pad is located on a gently sloping terrace on the east side of Dry Creek in the bottom of Dry Canyon. The canyon is deeply incised with very steep walls and cliffs on either side. The northwest corner of the inventory block contains very high sandstone cliffs and narrow ledges. The southeast corner of the block has steep talus slopes with some small, isolated sandstone outcrops. A narrow but tall sandstone outcrop occurs at the mouth of the draw in the extreme southeast corner of the block.

The vegetation cover throughout the project area is very dense (90-100%) allowing for poor to extremely poor ground surface visibility. It consists primarily of thick sagebrush, currant, and greasewood with some sparse juniper, pinyon, other tall shrubs, and a few cottonwood trees scattered along the drainage. Sparse mixed pine trees are present on the higher slopes above the canyon bottom. Sediments in the canyon bottom are coarse alluvial deposits consisting of a light brown sand with an abundance of cobbles, pebbles and gravels. High energy, colluvial deposits are located along the base of the steep slope in the southeast corner of the block. These consist of angular talus deposits at the base of the slope and a thick apron of very coarse debris spreading out to the edge of Dry Creek from the mouth of the draw at the south end of the proposed well pad. All of the deposits in the project area appear to be very high energy and of too recent an age to contain intact cultural materials.

## Files Search

The files of the Division of State History were consulted on July 20, 1998 to ascertain if there were any previous inventories or previously recorded sites in the project area. One previous pipeline inventory was carried out by AERC in 1987 for a pipeline (Project #U-87-AF-0356) and recorded no sites in section 19. Six miles of Dry Canyon were inventoried in 1972, including the current section. Of the 21 sites recorded, six sites were recorded in section 19 during that survey of which two lie in close proximity to the present project area (42CB68 and 42CB230). All the others lie several hundred feet to the south-southwest further up Dry Canyon.

The current project area is located within a previously nominated National Historic District. The proposed Nine Mile Canyon Archaeological District includes Nine Mile Canyon and Dry Canyon. Documentation of the district was requested from the BLM Price River Resource Area archaeologist. Several phone conversations and other exchanges of information occurred between MAC and the BLM Price River Resource Area archaeologist regarding the district and the management of cultural resources within it.

## **Field Methods**

The inventory block around the well pad center stake was surveyed by a series of parallel pedestrian transects spaced at 15 meter intervals. Due to the steepness of the slopes in the southeast corner of the block, wider transects spaced up to 30 meters apart were employed. Because of the proximity to a possible National Register District containing numerous sites including Fremont Culture rock art and structural sites, special attention was paid to the large, tall sandstone cliffs and narrow ledges in the northwest corner of the inventory block. Special attention was also paid to areas of enhanced subsurface visibility, such as arroyo cutbanks, rodent back dirt piles, road cuts, and animal trails. No cultural resource inventory was pursued outside the ten acre block.

When cultural resources were encountered, the area around the them is intensively examined until all manifestations of the resource have been identified. Five or more artifacts within 50 meters of each other, or one or more artifacts in association with one or more features is defined as a site. Four artifacts or less within 50 meters of each other is defined as an isolated find. The appropriate forms are filled out, and in the case of sites a sketch map and overview photographs taken of the resource. All cultural resources are plotted on the appropriate USGS 7.5' Quadrangle.

## **Results**

The entire project area falls within the Nine Mile Canyon Archaeological District. There are three sites wholly or partly within the project area. These include 42CB68 and 42CB230, both previously recorded, and 42CB1252, newly discovered and recorded for the current project. Previously recorded site 42CB230 could not be found, though its plotted location places it within the ten acre well pad survey block. 42CB68 was found, essentially as originally recorded. All three sites fall outside the areas that will be physically impacted by construction and operation of the well, though indirect impacts may result from increased activity in the area due to the construction of the well pad and access road, and drilling and operation of the well.

**Nine Mile Canyon Archaeological District.** The Nine Mile Canyon Archaeological District was originally defined and nominated to the National Register in 1974<sup>1</sup> (McTaggart

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<sup>1</sup> Brigham Young University and the Utah Statewide Archaeological Society have undertaken cultural resource inventories in lower and middle Nine Mile Canyon, respectively, in

1974). The nomination did not proceed due to lack of permission from a majority of landowners in the District. The Statement of Significance reads simply:

This area contains the greatest known concentration of archaeological sites in the San Rafael Fremont area. Over one hundred rock art sites are known. In addition there are numerous dwelling sites and structural remains. A formal survey would probably reveal many more. The Dry Canyon drainage has been surveyed and contains 21 sites in a 6 mile segment. Nine Mile, and major tributaries, probably contain similar concentrations.

The historical aspect of the district is important. There are remains of old stage stations dating from the late 1800's. The current telephone line is partly supported on iron poles which were originally part of the telegraph line between Price and Fort Duchesne. These poles reportedly were used because the Indians kept cutting down the wooden poles. The historical aspect should be researched in greater detail. (McTaggart 1974:part 8)

BLM provided MAC with two different maps showing the boundaries of the District. One, marked from 1973, shows the District boundaries defined along section, half section and quarter section lines. It extends along Nine Mile Canyon from the Green River to a point about two miles west of the confluence of Minnie Maud and Argyle creeks. It includes all or part of the following sections:

T11S R14E, secs 32, 33, 34, 35 and 36  
 T11S R15E, secs 31, 32, 33 and 34  
 T11S R16E, sec 36  
 T11S R17E, secs 25, 26, 27, 28, 31, 32, 33, 34, 35 and 36  
 T11S R18E, secs 26, 27, 28, 29, 30, 31, 32, 33, 34 and 35  
 T12S R14E, secs 1, 2, 3, 4, 5 and 6  
 T12S R15E, secs 2, 3, 4, 5, 6, 10, 11, 12, 23, 24, 26, 27 and 28  
 T12S R16E, secs 1, 2, 7, 8, 9, 10, 11, 16, 17, 18 and 19

The other map, dated 1974, shows the boundaries defined more on topographic conditions. It encompasses a broader area generally than the sections listed above, including more of the Minnie Maud Creek drainage at the west end, but stops about six or seven miles upstream of the confluence of Nine Mile Creek and the Green River. By either map, the present project area is wholly within the District boundaries.

The District is being treated as a rural historic landscape (Blaine Miller, personal communication to the junior author, August, 1998), the definition of which incorporates that of a district (NPS n.d.) but places it within a geographic context. A rural historic landscape is

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1989 to 1991 in preparation for another nomination (Spangler n.d.). This nomination is not yet complete (Blaine Miller, personal communication to the junior author, August, 1998).



a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features. (McClelland et al. n.d.)

As such, both the sites within the District and the landscape itself can be integral and inseparable parts of the definition and significance of the District. It is appropriate to consider impacts not just to particular sites, but to the landscape itself, when management recommendations are being formulated as part of a cultural resource inventory. Sites and landscapes within the District can be considered to be individually distinctive, or focal points of the district. These sites or landscapes certainly manifest and reflect the characteristics that cause the district to be eligible. It is also possible to consider the district eligible even if all components lack individual distinction (NPS n.d.:5), in which case it must be the aggregate of components (i.e., sites and landscapes) that retains essential integrity and expresses the characteristics and qualities of the district. Conversely, "a district can contain buildings, structures, sites, objects, or open spaces that do not contribute to the significance of the district" (NPS n.d.:5).

The Nine Mile Canyon Archaeological District certainly appears to meet the criteria of a district and a rural historic landscape, given the concentration and linkage of prehistoric sites and their relationship to the canyon and its major tributaries, as well as the relationship between various early historic sites and the canyon as a historic transportation and communication corridor. Unfortunately, these associations and characteristics, though inherently apparent to anyone who has studied or is familiar with the cultural history of the area and the canyon (e.g. Spangler n.d., Schaafsma 1971:28-40), are not yet well defined in the context of a National Register district and its management within the Section 106 process. Without that guidance, the evaluation of particular sites is problematic, as is the broader assessment of impacts to the District and the landscape. The following site evaluations reflect this difficulty.

**42CB68.** 42CB68 consists of two granaries located at the base of the cliff on the west side of the floor of Dry Canyon. It was recorded originally in 1972 (Fike 1972). The site lies on the west edge of the ten acre survey block and is mostly outside the block. At its nearest point, it is about 30 m west of the western end of the proposed access road. The cliff face in which these features are located faces south, not directly at either the proposed well pad or access road, but the features are visible from the beginning of the access road, if not the well pad itself, though they are difficult to spot as evidenced in the photos accompanying the site form (Appendix).

The site consists of two granaries of probable Fremont cultural affiliation roughly 45 m apart, and situated on a narrow sandstone ledge on the west side of Dry Creek. Both granaries are located approximately 2.5 m above the present ground surface and are of roughly similar dimensions (2m x 1m x 1m). Granary #1 is generally rectangular; granary #2 is more oval in shape. Granary #1 is constructed of angular, tabular, sandstone fragments with mud mortar while granary #2 is constructed of adobe bricks with some tabular sandstone fragments used in the lower walls. Both granaries are severely deteriorated and granary #1 is partially filled with bird

or bat guano. There is no evidence of archaeological deposits either within the granaries, on adjacent ledges, or on the valley floor below the granaries.

**42CB230.** This site consists of a single rock art panel containing one petroglyph and one pictograph on a southwest-facing cliff. An intensive search for this panel during the current inventory failed to locate it. The following description, and the mapped location, are taken from McTaggart (1972).

The rock art panel consists of two abstract elements whose spatial relationship to one another is not described. One element is a pictograph consisting of two parallel vertical lines of six dots each, described as being 12" in dimension (high?). The dots are of white pigment, but have been "covered over with brown paint." The other element, a petroglyph (of unknown manufacturing technique) consists of two individual, apparently abstract figures, one above the other, of unknown dimension. "Potholing," presumably meaning illegal excavations, is noted at the base of the cliff.

The mapped location of this panel places it on a south-southwest-facing cliff in the southern part of the ten acre well pad survey block, across a small, steep draw and about 70 or 80 m from 42CB1252, described below. It is outside the footprint of the proposed well pad, and not in a location at risk of direct physical impact. As evidenced by MAC's inability to find the site, it is also not readily visible, unless it was missed because the location is incorrectly plotted.

**42CB1252.** This site consists of a single pictograph on the underside of a rock overhang on the south side of a steep, narrow draw on the east side of Dry Creek. The panel faces north-northwest, down the canyon of Dry Creek, and is across the draw from the mapped location of 42CB230 (though this site was not found, see above). The viewshed from the panel location looks out over the proposed well pad. The panel is located on the underneath side of an overhang, a little more than 1.5 m above the ground.

The pictograph consists of a rough C-shaped semi-circle of hash marks or tick marks, closely spaced, and radiating outward from a narrow, discontinuous line. The pictograph measures about 41 cm by 23 cm. One "leg" of the "C" is obscured by desert varnish and lichen. There are no other associated elements, structures or objects in the overhang or in the immediately surrounding area. Abstract rock art elements consisting of rows of tick marks or hash marks are among the motifs known for Fremont rock art in this area, but are not among the more common abstract forms (Schaafsma 1971). The age of this panel is unknown, though presumed to be Fremont.

The site is located near the center of the south edge of the ten acre well pad inventory block, and more than 100 feet from the nearest portion of the proposed well pad footprint. The site will not be directly impacted by the proposed development, though it is within view of the well pad location.

## Recommendations

Because the proposed well pad is located within the Nine Mile Canyon Archaeological District, recommendations concerning cultural resources must be made within the context of the district. All three sites, 42CB68, 42CB230 and 42CB1252, embody qualities and characteristics that are part of the district through their representation of the prehistoric occupation of the area. Likewise, as a rural historic landscape, the larger environment of the project area in general is a key part of the district, and is made more so because of association with these sites.

The district itself is not well defined, nor has it been formally enrolled on the National Register. Because of this, evaluating and treating cultural resources within the district is beyond the scope of this investigation. Further, there is another level of management direction provided by a 1995 BLM management plan for the Nine Mile Canyon Special Recreation and Cultural Management Area (Blaine Miller, personal communication to the junior author, August, 1998), which may provide guidance in this regard. For these reasons, MAC will not make particular recommendations concerning how the district and the individual cultural resources should be treated with respect to the proposed project. Observations about the nature of impacts to the individual sites and the larger district are made, along with suggestions for measures that might be used to reduce or eliminate some of those impacts. These should assist the BLM in determining affect and, ultimately, deciding whether or not to permit the well insofar as that decision rests with concerns about cultural resources.

The two individual sites that were found within the project area, considered by themselves and exclusive the district context, do not appear to be eligible for the National Register. 42CB68 consists only of two granaries, both of which are in poor condition and lack essential physical integrity. There is no potential for associated archaeological materials. Granaries are a very typical site type in the area, and these are not exceptional examples by any means. 42CB1252 consists of a single pictograph. Its integrity is fair; parts of it have been obliterated by natural processes. Like the granaries, this site is typical and not exceptional in any way. 42CB230 could not be found, but, based on the existing description, it too is not distinctive or exceptional.

Though all three of these sites are outside the APE for direct physical impacts resulting from construction, operation, and maintenance of the proposed well pad and access road, the proposed development poses other possible threats to these resources. All three sites are located on cliff faces, and the geologic stability of these cliffs is not known. Vibration from construction and drilling presents a very remote possibility of damage due to spalling, collapse, or dislodging of pieces of the cliff. Any situation that increases access to this area will increase the exposure of these sites to vandalism (42CB230 has apparently already been subject to illegal excavations). Altered atmospheric conditions, such as dust, vehicle and equipment exhaust, and vapors and fumes produced by construction and production at the well, may impact the sites, and are a more pronounced threat to the rock art panels. An on-location archaeological monitor during construction can minimize the threat due to vandalism. Dust suppression measures could be implemented on the access road and the well pad itself to minimize the creation of dust due to vehicle and equipment traffic. The threat of cliff collapse is not easily predictable and is

extremely slight in any event, and there is no reasonable means to prevent such an unlikely and unpredictable occurrence. Periodic visits to the project area following completion of the well can serve to document any changes to the sites, including vandalism, but cannot be expected to prevent such impacts.

Impacts to the district itself, and to the landscape of the district and the setting of these sites, are much more difficult to assess in the absence of a comprehensive discussion of the significance and integrity of these aspects of the district. Dry Canyon in the vicinity of the proposed well is, at present, relatively undisturbed, and presumably essentially unaltered from its condition at the time of Fremont occupation (with the exception of natural evolution and migration of the creek channel and vegetation changes resulting from historic and recent grazing). The only notable "modern" alteration is the road present along the valley floor. This road, depending on one's vantage point and direction of view, presents varying degrees of visual intrusion on the integrity of the viewsheds of the valley, ranging from being essentially not visible to being quite apparent (Figure 2).

The construction of the well pad, and the access road to a much lesser degree, will present a noticeable intrusion on the integrity of most viewsheds in this part of the canyon. The canyon floor at this point is relatively narrow, and surface disturbance of one form or another will extend over a significant portion of the breadth of the valley floor here. Though lines of sight to and from the proposed well pad were not specifically investigated, it appears that at least portions of the well will be visible from points up to several thousand feet up and down the canyon from the well location. The well pad itself, depending on its size, the magnitude of any necessary cuts and fills, and the amount of topsoil and excess materials stockpiling required, will be quite visible, and clearly "out of place" within the context of the historic and prehistoric setting and landscape of this part of Dry Canyon. Production facilities on the well pad will also be quite visible, and, because they involve modern above-ground structures rather than simple earthworks or modifications to the surface, present a potentially greater visual impact than the well pad itself.

A number of options exist that might lessen the visual intrusion of the proposed well pad on the integrity of the canyon's viewsheds, though shy of not drilling the well, there is probably no reasonable way to eliminate the impacts altogether. Limiting the size of the well pad to the greatest extent feasible will limit the magnitude of the intrusion, though there are constraints to this reduction posed by the size of the drill rig necessary to drill the well. Restoration of the well pad to original grade and careful and thorough re-vegetation once construction is complete, will lessen visual impacts, though it is probably impossible to expect re-vegetation to completely mask any disturbances within a reasonable period of time. Requiring low profile production facilities, and painting them a non-intrusive color will lessen their visibility. Placement of production facilities off the pad in another location where the visual impacts would be lessened or of less concern (such as on another nearby existing well pad, behind a natural vegetation screen, or in a less visible or more disturbed part of the canyon) can be considered though this may not be feasible from an engineering standpoint or there simply may be no suitable place to relocate these structures.



View northwest from base of cliffs on east side of Dry Canyon, looking across proposed well location (red and white well centerstake flag is visible in center of frame). Access will come from road on far side of valley floor, and enter frame of photo from the left edge.



View north looking across proposed well location (red and white well centerstake flag is visible in center of frame) and down Dry Canyon. Existing road in Dry Canyon is partially visible along trees on left side of frame. Access to the well pad will come from behind this vantage point on the left.

Figure 2 Photographs of project area

## Summary

Two sites were found in the project area of the proposed Mission Energy Federal 1-19 well location and access road. A third, previously recorded site, is reportedly in the project area, but could not be found. The project area lies wholly within the Nine Mile Canyon Archaeological District. A discussion of potential impacts, and possible mechanisms to minimize or eliminate most of these impacts, has been presented, but no recommendations are made concerning the management of these resources because of inadequate definition of the District and the characteristics and qualities that cause it to be eligible. Such an endeavor is well beyond the scope of this project.

## References Cited

Fike, Richard

- 1972 USDI BLM Antiquities Site Inventory form for 42CB68. On file, Utah Division of State History, Salt Lake City.

Hintze, Lehi

- 1980 *Geologic Map of Utah*. Utah Geological Survey, Salt Lake City.

McClelland, Linda Flint, J. Timothy Keller, and Genevieve P. Keller

- n.d. *Guidelines for Evaluating and Documenting Rural Historic Landscapes*. National Register Bulletin 30. USDI National Park Service, Interagency Resources Division.

McTaggart, Edward W.

- 1972 USDI BLM Antiquities Site Inventory form for 42CB230. On file, Utah Division of State History, Salt Lake City.
- 1974 National Register of Historic Places Inventory Form for the Nine Mile Canyon Archaeological District. On file, BLM Price River Resource Area, Price, Utah.

National Park Service (NPS)

- n.d. *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. USDI National Park Service, Interagency Resources Division.

Schaafsma, Polly

- 1971 *The Rock Art of Utah*. Papers of the Peabody Museum of Archaeology and Ethnology, volume 65. Harvard University, Cambridge, Massachusetts.

Spangler, Jerry D.

- n.d. One-pot Pithouses and Fremont Paradoxes. In *Intermountain Archaeology*, edited by David B. Madsen and Michael D. Metcalf. Unpublished manuscript.

## APPENDIX

### Site Forms

(separate cover, agency copies only)

## **Mission Energy, L.L.C. Federal #1-19**

### **PURPOSE:**

Mission Energy, L.L.C. retained Uintah Engineering and Land Surveying (UELS, Inc.) to evaluate alternative location layouts for Mission Energy's proposed Federal #1-19 well location. The Mission Energy, L.L.C. Federal #1-19 is located in Section 19, T12S, R16E, S.L.B.&M. The intent of this report is to describe the evaluation conducted by UELS, Inc.

### **GENERAL:**

Three location sites were evaluated for the Mission Energy, L.L.C. Federal #1-19 well location (See Topo C). Engineering observations were made for each well site. The observations and best site selection are described below.

#### **Proposed Location Site:**

The proposed site is shown on the on Topo "C" as the middle of the three sites evaluated. This site is the best of the three alternatives. The site is located between two side hill drainage channels and provides the best drainage past and around the site with the least natural drainage disturbance. The site also provided the best natural ground gradient for pad construction. The cut and fill will not extend large distanced up the canyon side. This alternative also provides the best opportunity to reclaim the well site with no permanent visual disturbance. This site can also be constructed with the least amount of earthwork.

#### **Proposed Alternate #1 Location Site:**

Alternate site #1 is located south of the proposed location site. This site is shown as the most southerly alternative on Topo "C". This site is the worst of the three sites evaluated. The site is located within a side hill drainage channel. The channel must be re-directed around to the northeast side of the well pad. The drainage onto the pad from the cut slope must be intercepted with a ditch along the southwest side of the pad. This ditch would be constructed to daylight to the side hill drainage channel diversion to the northeast of the pad. The cut-slopes of the pad must extend into the hillside to construct an acceptable gradient. More earthwork will be required with large cut and slopes and excess material storage piles. The site can be rehabilitated but will require considerable expense and will be difficult to re-vegetate.

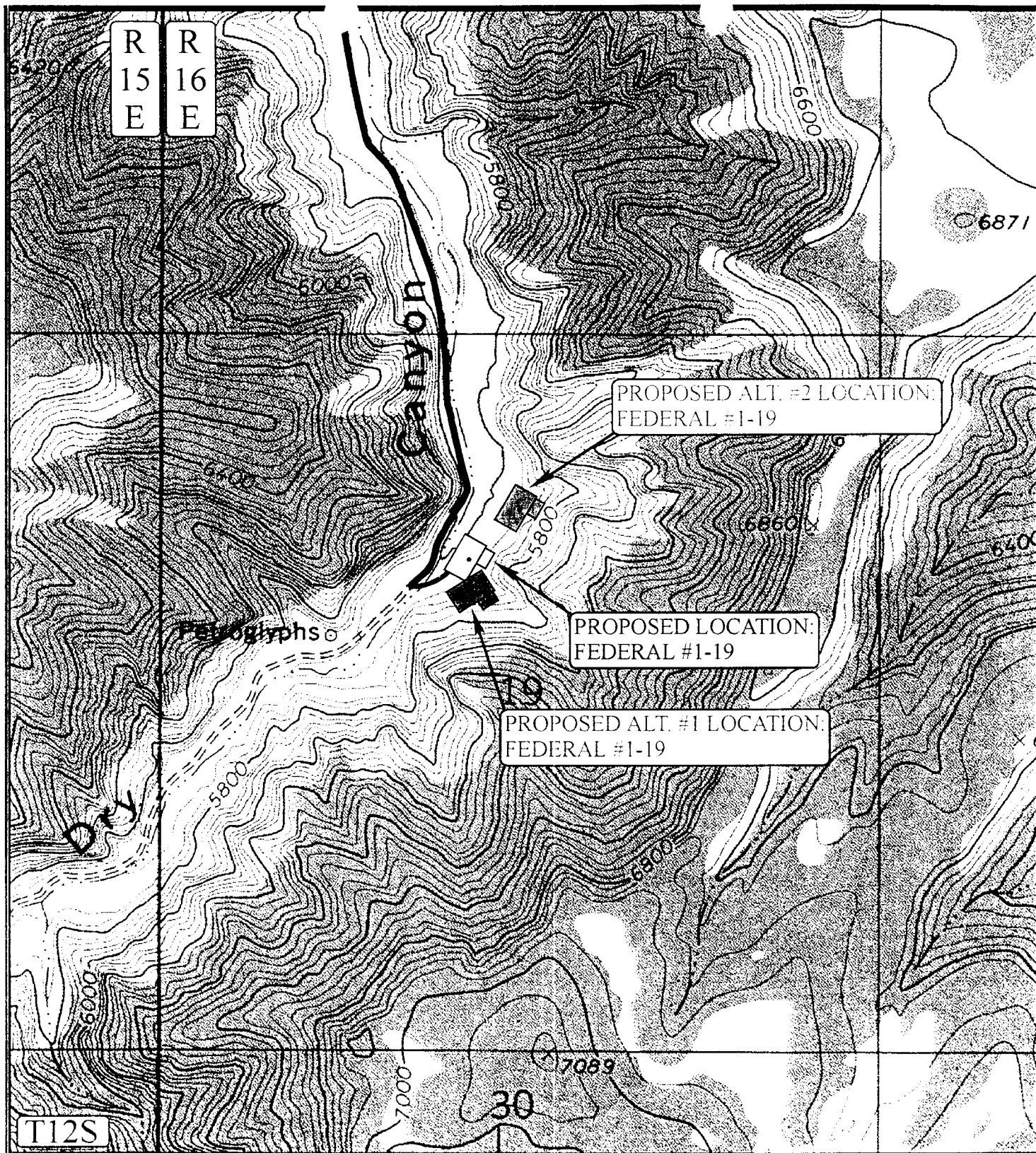


**Proposed Alternate #2 Location Site:**

Alternate site #2 is located north of the proposed location site. This site is shown as the most northerly alternative on Topo "C". This site is the second best of the three alternatives. Similar to alternate #1 the site blocks a side hill drainage channel. The channel must be re-directed around the northeast side of the well pad. The channel re-direct will have to be prepared with care to prevent drainage into the pit. The drainage onto the pad from the cut slope must be intercepted with a ditch along the southwest side of the pad. This ditch will be constructed to drain each way from the center of the pad and will be constructed to daylight to the side hill drainage channel diversion to the northeast side of the pad and to the natural drainage channel of dry canyon. The cutslope will extend into the hillside and will produce excess material that must be stockpiled. The site will be somewhat difficult to rehabilitate but can be done at some expense.

**CONCLUSION:**

The proposed location shown on Topo "C" is the best of the three sites. The basis for selection of this site are ease of construction, drainage, earthwork, and rehabilitation.



# LEGEND:

--- PROPOSED ACCESS ROAD  
 --- EXISTING ROAD

MISSION ENERGY, L.L.C.

FEDERAL #1-19  
 SECTION 19, T12S, R16E, S.L.B.&M.  
 1613' FNL 2228' FWL



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
 MAP

8 7 98  
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: J.L.G. REVISED: 00-00-00



WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/19/98

API NO. ASSIGNED: 43-007-30471

WELL NAME: FEDERAL 1-19  
OPERATOR: MISSION ENERGY LLC (N6010)  
CONTACT: Lisa Smith (303) 857-9999

PROPOSED LOCATION:

SENW 19 - T12S - R16E  
SURFACE: 1613-FNL-2228-FWL  
BOTTOM: 1613-FNL-2228-FWL  
CARBON COUNTY  
WILDCAT FIELD (001)

LEASE TYPE: FED  
LEASE NUMBER: UTU-65486  
SURFACE OWNER: Federal

INSPECT LOCATION BY: / /

TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

PROPOSED FORMATION: MVRD

RECEIVED AND/OR REVIEWED:

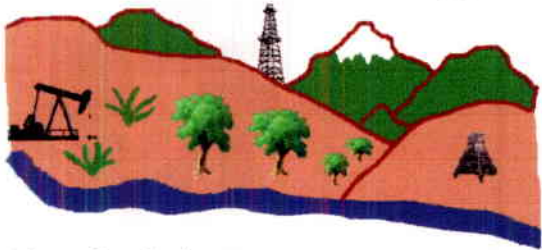
☒ Plat  
☒ Bond: Federal ☒ State ☐ Fee ☐  
(No. KT-1091)  
☒ Potash (Y/N)  
☒ Oil Shale (Y/N) \*190-5(B)  
☒ Water Permit  
(No. Price River Water District)  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_)  
☒ St/Fee Surf Agreement (Y/N)

LOCATION AND SITING:

☒ R649-2-3. Unit Jack's Canyon  
☐ R649-3-2. General  
☒ ~~R649-3-3. Exception~~  
☒ Drilling Unit  
Board Cause No: 157-03  
Date: \*Board Apr. 4/25 Final in progress.  
Suspends Gen. Siting.

COMMENTS: \* Not listed 1998 Unit P.O.D. (BLM/SL Added 8-31-98)

STIPULATIONS: ① FEDERAL APPROVAL



Utah Oil Gas and Mining

OPERATOR: MISSION ENERGY LLC (N6010)

SEC. 19, T12S, R16E

FIELD: WILDCAT (001)

COUNTY: CARBON UNIT: JACKS CANYON  
SPACING: R649-3-3/EX LOC

T12S R15E

T12S R16E

13

18

17

JACK'S CANYON  
EXPLORATORY UNIT

FEDERAL 1-19



24

19

20

IRON MESA FED 19-14



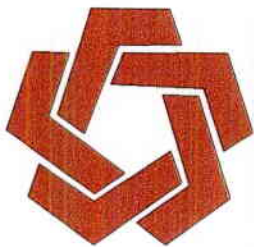
25

30

CAUSE 157-1 (640')

29

PETER'S POINT  
FIELD



DIVISION OF OIL, GAS & MINING

OPERATOR: MISSION ENERGY (N6010)

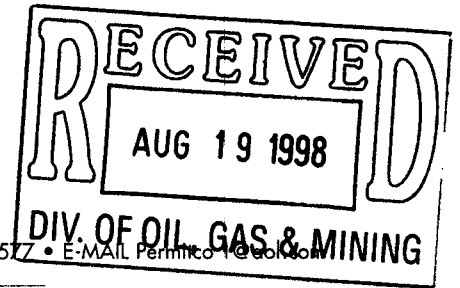
FIELD: WILDCAT (001)

SEC. 19, TWP 12S, RNG 16E

COUNTY: CARBON UAC: R649-2-3 JACKS'C CANYON UNIT



DATE PREPARED:  
26-AUG-1998



14421 Weld County Rd.10 • Ft. Lupton, Colorado 80621 • (303) 857-9999 • FAX (303) 857-0577 • E-MAIL Permitco@colorado.net

August 17, 1998

Bureau of Land Management  
82 E. Dogwood  
Moab, UT 84532

Attn: Minerals

Re: Mission Energy, L.L.C.  
Federal #1-19  
1613' FNL and 2228' FWL  
SE NW Sec. 19, T12S - R16E  
Carbon County, Utah  
Lease No. UTU-65486

Gentlemen:

Enclosed please find three copies of the A.P.D. for the subject well, along with all necessary attachments.

This lease contains a stipulation which states that no drilling activity is to occur within 330 feet of a stream, unless this stipulation is waived by the Authorized Officer. As requested by Dean Nyffeler of the BLM in Price, Utah, we have attached a summary (located in the back of the A.P.D.) showing additional locations considered that would meet the 330 foot requirement. These two alternate locations were not selected and our justification for this is shown on the attached summary. We are requesting that this stipulation be waived and the processing of this A.P.D. be allowed to continue.

If you should need additional information, please don't hesitate to contact me.

Sincerely,

PERMITCO INC.

Lisa L. Smith  
Consultant for:  
Mission Energy, L.L.C.

Enc.

cc: Mission Energy, L.L.C. - Denver, CO  
Wayne Fisher - Loveland, CO

BLM - Price, UT  
Utah Div. of Oil, Gas & Mining - SLC

**CONFIDENTIAL - TIGHT HOLE**

**ONSHORE OIL & GAS ORDER NO. 1**

**Approval of Operations on Onshore  
Federal and Indian Oil & Gas Leases**

**Federal #1-19  
1613' FNL and 2228' FWL  
SE NW Sec. 19, T12S - R16E  
Carbon County, Utah**

**Prepared For:**

**MISSION ENERGY, L.L.C.**

**By:**

**PERMITCO INC.  
14421 Weld County Road 10  
Fort Lupton, Colorado 80621  
303/857-9999**

**Copies Sent To:**

- 3 - BLM - Moab, UT**
- 1 - BLM - Price, UT**
- 1 - Utah Division of Oil, Gas & Mining - SLC, UT**
- 10 - Mission Energy, L.L.C. - Denver, CO**
- 1 - Wayne Fisher - Loveland, CO**

**CONFIDENTIAL - TIGHT HOLE**



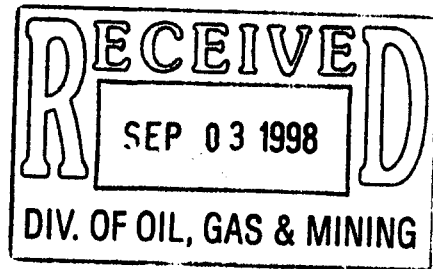
# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

August 31, 1998



### Memorandum

To: Assistant District Manager Minerals, Moab District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 1998 Plan of Development Jack's Canyon Unit  
Carbon County, Utah.

We are in receipt of a letter from Richard L. Manus, Price Field Office Manager, to Lisa L. Smith, PERMITCO INC. The content of the letter indicates the following well is planned for calendar year 1998 for the Jack's Canyon Unit, Carbon County, Utah.

1-19 SE $\frac{1}{4}$ NW $\frac{1}{4}$  Section 19, T. 12 South, R. 16 East

This office has no objection to permitting the well at this time.

However, this location appears to meet the criteria for the second obligation well, (which must be commenced within 6 months from completion of the LaVinia State #1-32 unless a situation constitutes an "unavoidable delay" as outlined in section 25 of the Jack's Canyon Units agreement) but has a lease stipulation which could result in the denial of the Application for Permit to Drill without denying lease rights as outlined in 3101.1-2. As such, we would recommend that the Unit operator be encouraged to permit an alternate location which would not necessitate a waiver of a lease stipulation.

/s/ Michael L. Coulthard

bcc: File - Jack's Canyon Unit  
Division of Oil Gas and Mining  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:08/31/98





State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210  
PO Box 145801

Salt Lake City, Utah 84114-5801  
801-538-5340

801-359-3940 (Fax)  
801-538-7223 (TDD)

Michael O. Leavitt  
Governor

Lowell P. Braxton  
Division Director

September 8, 1998

Mission Energy, L.L.C.  
621 17th Street, Suite 2450  
Denver, Colorado 80293

Re: Federal 1-19 Well, 1613' FNL, 2228' FWL, SE NW, Sec. 19,  
T. 12 S., R. 16 E., Carbon County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-007-30471.

Sincerely,

A handwritten signature in black ink, appearing to read 'John R. Baza'.

John R. Baza  
Associate Director

lwp

Enclosures

cc: Carbon County Assessor  
Bureau of Land Management, Moab District Office

Operator: Mission Energy, L.L.C.  
Well Name & Number: Federal 1-19  
API Number: 43-007-30471  
Lease: UTU-65486  
Location: SE NW Sec. 19 T. 12 S. R. 16 E.

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours prior to spudding the well. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval which must be obtained prior to drilling.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reenter a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

UTU-65486

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA, Agreement Designation  
Jack's Canyon

8. Well Name and No.  
#1-19

9. API Well No.  
43-007-30471

10. Field and Pool, or Exploratory Area  
Wildcat

11. County or Parish, State  
Carbon County, Utah

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Gas  
☐ Well ☒ Well ☐ Other

2. Name of Operator

Wasatch Oil & Gas, LLC

3. Address and Telephone No.

P.O. Box 699, Farmington, UT 84025-0699 (801) 451-9200

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1613' FNL, 2228' FWL; Section 19, T12S-R16E

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Change of Operator

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Wasatch Oil & Gas, LLC has succeeded Mission Energy, L.L.C. as record title holder to UTU-65486 and is hereby requesting the APD for the #1-19 be transferred to Wasatch Oil & Gas, LLC.  
Wasatch is bonded under statewide bond UT-1125 filed with the Utah State Office of the BLM  
Wasatch would like to maintain this APD for an additional year.

RECEIVED

MAR 23 2001

DIVISION OF  
OIL, GAS AND MINING

14. I hereby certify that the foregoing is true and correct

Signed R. Heggie Wilson R. Heggie Wilson

Title Agent

Date 3/21/01

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

Note: 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations or to any matter within its jurisdiction.

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reenter a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.

UTU-65486

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA, Agreement Designation  
Jack's Canyon

8. Well Name and No.  
#1-19

9. API Well No.  
43-007-30471

10. Field and Pool, or Exploratory Area  
Wildcat

11. County or Parish, State

Carbon County, Utah

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Gas  
☐ Well ☒ Well ☐ Other

2. Name of Operator

Wasatch Oil & Gas, LLC

3. Address and Telephone No.

P.O. Box 699, Farmington, UT 84025-0699 (801) 451-9200

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1613' FNL, 2228' FWL; Section 19, T12S-R16E

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Change of Operator

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Wasatch Oil & Gas, LLC has succeeded Mission Energy, L.L.C. as record title holder to UTU-65486 and is hereby requesting the APD for the #1-19 be transferred to Wasatch Oil & Gas, LLC.

Wasatch is bonded under statewide bond UT-1128 filed with the Utah State Office of the BLM

Wasatch would like to maintain this APD for an additional year.

**RECEIVED**

MAR 22 2001

DIVISION OF  
OIL, GAS AND MINING

14. I hereby certify that the foregoing is true and correct

Signed R. Heggie Wilson Title Agent

Date 3/21/01

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:



March 22, 2001

Ms. Lisha Cordova  
State of Utah  
Dept. of Natural Resources  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Re: Sundry Notices  
Change of Operator

Dear Lisha:

Enclosed in duplicate, please find Sundry Notices pertaining to the transfer of ten APDs and operator from Mission Energy, LLC to Wasatch Oil & Gas, LLC pertaining to the below listed well:

<u>API #</u>	<u>Legal Description</u>	<u>Well Name</u>
* 43-007-30471	T12S-R16E; Sec 19	Jack's Canyon #1-19
* 43-007-30470	T12S-R15E; Sec. 29	Henzel #1-29
* 43-007-30394	T12S-R17E; Sec. 10	Burruss #1-10
43-007-30523	T12S-R16E; Sec. 19	Iron Mesa #19-14
43-007-30524	T12S-R14E; Sec. 25	Prickley Pear #25-02
43-007-30525	T12S-R15E; Sec. 29	So. Ridge #29-11
43-007-30526	T12S-R15E; Sec. 30	Plateau Fed. # 30-02
43-007-30527	T12S-R15E; Sec. 30	So. Ridge #30-15
43-007-30522	T12S-R15E; Sec. 16	Upper Cabin #16-15
43-007-30528	T12S-R15E; Sec. 36	Flat Top #36-02

At this time Wasatch would like to request that all ten APDs be given a one-year extension so that they may be either be completed or utilized for drilling purposes.

Please do not hesitate to contact our office regarding this matter.

Sincerely,

R. Heggie Wilson  
Agent

**RECEIVED**

MAR 23 2001

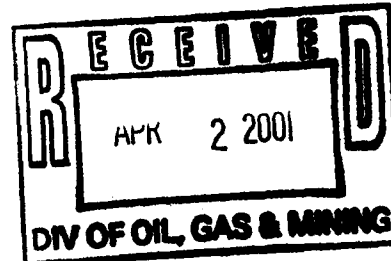
DIVISION OF  
OIL, GAS AND MINING

## Mission Energy LLC

---

April 2, 2001

Ms. Lisha Cordova  
State of Utah  
Dept. of Natural Resources  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-5801



Dear Lisha,

The leases pertaining to the wells listed on the attached letter from Fiegge Willson to yourself dated March 22, 2001, correctly reflects that all the APD's transferred with these leases last year.

If the DOGM has any questions about this they can call me at 760-436-9877.

Sincerely,

A handwritten signature in cursive script, appearing to read "J.C. Sutton".

J.C. Sutton  
President

Enclosure-1

Salt Lake City, Utah 84114-5801

Re: Sundry Notices  
Change of Operator

Dear Lisha:


Enclosed in duplicate, please find Sundry Notices pertaining to the transfer of ten APDs and operator from Mission Energy, LLC to Wasatch Oil & Gas, LLC pertaining to the below listed well:

APD#	Legal Description	Well Name
43-007-30471	T12S-R16E; Sec. 19	Jack's Canyon #1-19
43-007-30470	T12S-R15E; Sec. 29	Hansel #1-29
43-007-30394	T12S-R17E; Sec. 10	Burns #1-10
43-007-30523	T12S-R16E; Sec. 19	Ivan Mesa #19-14
43-007-30524	T12S-R14E; Sec. 25	Pritchey Pass #25-02
43-007-30525	T12S-R15E; Sec. 20	So. Ridge #29-11
43-007-30526	T12S-R15E; Sec. 30	Platteau Fed. # 30-02
43-007-30527	T12S-R15E; Sec. 30	So. Ridge #30-15
43-007-30522	T12S-R15E; Sec. 16	Upper Cabin #16-15
43-007-30528	T12S-R15E; Sec. 36	Fish Top #36-02

At this time Wasatch would like to request that all ten APDs be given a one-year extension so that they may be either be completed or utilized for drilling purposes.

Please do not hesitate to contact our office regarding this matter.

Sincerely,

  
R. Heggie Wilson  
Agent

**RECEIVED**

MAR 23 2001

DIVISION OF  
OIL, GAS AND MINING

PO Box 589 • Farmington, UT 84025-0089 • Tel (801) 451-9200 • Fax (801) 451-9204

# MISSION ENERGY, LLC

*Heggie: does this work? TR*

## FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Todd Cusick	J.C. Sutton
COMPANY:	DATE:
Wasatch Oil & Gas	APRIL 2, 2001
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
801-451-9204	13
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
RE:	YOUR REFERENCE NUMBER:

☐ URGENT ☐ FOR REVIEW ☐ PER YOUR REQUEST ☐ PLEASE REPLY

### NOTES/COMMENTS:

Todd:

Here is the letter you requested.

Thanks,

J.C. Sutton

531 ENCINITAS BOULEVARD, SUITE 200  
ENCINITAS, CA. 92024  
PHONE 760-436-9877  
FAX 760-944-0076





# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

April 26, 2001

R. Heggie Wilson, Agent  
Wasatch Oil & Gas Corporation  
P. O. Box 699  
Farmington, Utah 84025-0699

Re: Request for APD Extension(s)

Dear Mr. Wilson:

In response to your letter dated March 22, 2001 (copy enclosed), please be advised that the Division of Oil, Gas and Mining (the Division) has approved your request for a one-year APD extension for the wells listed below, effective today. In addition, the Division has accepted the transfer of operator from Mission Energy LLC (Mission) to Wasatch Oil & Gas Corporation (Wasatch).

Federal 1-19	Sec. 19, T12S, R16E	API No. 43-007-30471
Burruss Fed 1-10	Sec. 10, T12S, R17E	API No. 43-007-30394
Henzel Fed 1-29	Sec. 29, T12S, R15E	API No. 43-007-30470

The Bureau of Land Management (BLM), Moab office, has informed the Division that the APD's listed above have not been approved by their office as of today. State approval of these wells do not supersede the required federal approval which must be obtained prior to drilling.

The additional seven wells listed in your letter have not been approved by the Division, therefore your request for a one-year APD extension does not apply. The Division will update these unapproved APD files to reflect the change of operator from Mission to Wasatch and continue reviewing these files for permit approval. If we should need any additional information we will contact you.

Page 2  
Wasatch Oil & Gas Corporation  
April 26, 2001

Should you have any questions regarding this matter please contact me at  
(801)538-5296.

Sincerely,

A handwritten signature in cursive script that reads "Lisha Cordova".

Lisha Cordova  
Engineering Technician

Enclosure

cc: Bureau of Land Management/Moab Office  
Mission Energy LLC/J.C. Sutton  
Well File(s)



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Kathleen Clarke  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210  
PO Box 145801  
Salt Lake City, Utah 84114-5801  
801-538-5340  
801-359-3940 (Fax)  
801-538-7223 (TDD)

January 25, 2002

R. Heggie Wilson, Agent  
Wasatch Oil & Gas Company  
P. O. Box 699  
Farmington, Utah 84025-0699

Re: APD Rescinded – Federal 1-19, Sec.19, T.12S, R.16E – Carbon County, Utah,  
API No. 43-007-30471

Dear Mr. Wilson:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on September 8, 1998. On April 26, 2001, the Division granted a one-year APD extension. On January 25, 2002, you requested that the APD for the Federal 1-19 well be rescinded. No drilling activity at this location has been reported to the division. Therefore, as requested, approval to drill the well is hereby rescinded, effective January 25, 2002.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Lisha Cordova  
Reclamation Specialist

cc: Well File  
Bureau of Land Management, Moab



June 27, 2003

Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

ATTENTION: Ms. Diana Mason

Dear Ms. Mason:

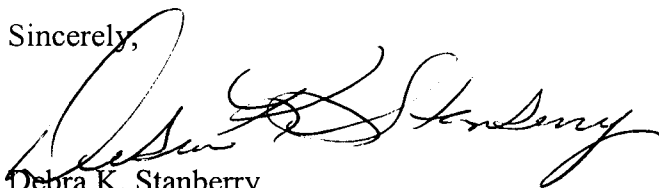
Upon further evaluation, Bill Barrett Corporation requests that the following eleven (11) APDs be cancelled at this time:

Prickly Pear Unit Federal 12-15-11-2	SENW Sec 11-T12S-R15E	43-007-30824
Jack Canyon Unit Federal 19-2	SENW Sec 19-T12S-R16E	43-007-30827
Burruss Federal #1-10	NESW Sec 10-T12S-R17E	43-007-30394
Federal #1-19	SENW Sec 19-T12S-R16E	43-007-30471
Henzel Federal #1-29	NWNE Sec 29-T12S-R15E	43-007-30470
Iron Mesa Federal #19-14	SESW Sec 19-T12S-R16E	43-007-30523
Prickly Pear Federal #25-02	NWNE Sec 25-T12S-R14E	43-007-30524
South Ridge Federal #29-11	NESW Sec 29-T12S-R15E	43-007-30525
Plateau Federal #30-02	NWNE Sec 30-T12S-R15E	43-007-30526
South Ridge Federal #30-15	NWSE Sec 30-T12S-R15E	43-007-30527
Hunt Ranch #3-2	NWNW Sec 3-T12S-R15E	43-007-30780

The records from Wasatch Oil and Gas reflected two more wells in progress, the Federal 30-07R and Federal 31-04R. If you have any paperwork pending in your office on these two wells, please also cancel these wells at this time.

If you have any questions or need additional information, please contact me at (303) 312-8120.

Sincerely,

  
Debra K. Stanberry  
Permit Specialist

RECEIVED

JUL 12 2003

DIV. OF OIL, GAS & MINING 1099 18TH STREET  
SUITE 2300  
DENVER, CO 80202  
P 303.293.9100  
F 303.291.0420